ABSTRACT OF THE DISCLOSURE

Method of identification and quantitative analysis of aldehyde(s) and/or ketone(s) in a sample by mass spectrometry using stable isotope labeled internal standard is provided. Said internal standard is prepared by reaction of an authentic sample of said aldehyde(s) and/or ketone(s) with a stable isotope labeled reagent, and is added to a sample containing said aldehyde(s) and/or ketone(s). Said aldehyde(s) and/or ketone(s) in said sample is then quantitatively converted to a chemical compound of identical structure, except the stable isotope atoms, as that of said internal standard using a non-labeled reagent. Said sample is then extracted and the extract is analyzed by mass spectrometry. Identification and quantification of said aldehyde(s) and/or ketone(s) are made from a plot of ion ratio of said converted aldehyde and/or ketone to said internal standard versus aldehyde and/or ketone concentration.

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